

# Claims

- [c1] 1. A data and charge adaptor for connecting a mobile device to a host device, the data and charge adaptor comprising:
- a first port comprising a first power line and at least a first data line, the first port for connecting to a communication port of the host device;
  - a data converter comprising at least a first end electrically coupled to the first data line, the data converter for converting first format data at the first end to second format data at at least a second end;
  - a second port comprising at least a second data line electrically connected to the second end, the second port for connecting to a corresponding data port of a mobile device;
  - a third port comprising a third power line electrically coupled to the first power line, the third port for connecting to a corresponding power port of the mobile device; and
  - a housing for holding the data converter.
- [c2] 2. The data and charge adaptor of claim 1 wherein the first port is a universal serial bus (USB) port comprising

two first data lines electrically connected to two first ends of the data converter, and comprising a first ground line electrically connected to a third ground line of the third port.

- [c3] 3. The data and charge adaptor of claim 1 wherein the second port further comprises three second data lines being a transmit line, a receive line, and a ground line electrically connected to three second ends of the data converter.
- [c4] 4. The data to charge adaptor of claim 1 further comprising a first ground line of the first port electrically connected to a third ground line of the third port.
- [c5] 5. The data and charge adaptor of claim 1 further comprising a second cable and a third cable connected to the housing for separately housing the second data line and the third power line.
- [c6] 6. The data and charge adaptor of claim 5 wherein the second port, second data line, and second cable are mechanically and electrically removably connected to the housing by a second cable connector.
- [c7] 7. The data and charge adaptor of claim 5 wherein the third port, third power line, and third cable are mechanically and electrically removably connected to the housing

by a third cable connector.

- [c8] 8. The data and charge adaptor of claim 1 further comprising a first cable for housing the first data and power lines.
- [c9] 9. The data and charge adaptor of claim 1 wherein the first port is integrally connected to the housing.
- [c10] 10. The data and charge adaptor of claim 1 wherein the data converter is capable of converting data of the second format at the second end to data of the first format at the first end.
- [c11] 11. The data and charge adaptor of claim 1 further comprising a charge light emitting diode (LED) electrically coupled to the first or third power line, the charge LED for indicating power on the first and third power lines.
- [c12] 12. The data and charge adaptor of claim 1 further comprising a data LED electrically connected to the first or second data line, the data LED for indicating data transfer between the first and second data lines.
- [c13] 13. A data and charge adaptor for connecting a host device communication port to a mobile device data port and a mobile device power port, the host device communication port comprising a host data port and a host

power port, the data and charge adaptor comprising:  
a first cable comprising a first power line and a first data line, the first data line for electrically coupling to the host data port for receiving a first format data, the first power line for electrically coupling to the host power port for receiving power;  
a housing comprising a second cable socket and a third cable socket, the third cable socket electrically coupled to the first power line;  
a data converter disposed within the housing, the data converter electrically coupled to the first data line for converting the first format data to a second format data, and outputting the second format data to the second cable socket;  
a second cable having a plug removably attached to the second cable socket, the second cable comprising a second data line for electrically coupling to the mobile device data port and forwarding the second format data to the mobile device data port; and  
a third cable having a plug removably attached to the third cable socket, the third cable comprising a third power line for electrically coupling to the mobile device power port and forwarding power to the mobile device power port.

[c14] 14. The data and charge adaptor of claim 13 wherein the

host data and power ports are a universal serial bus (USB) port comprising two first data lines electrically coupled to the data converter, and further comprising a first ground line electrically connected to a third ground line of the third cable.

[c15] 15. The data and charge adaptor of claim 13 wherein the second cable comprises three second data lines being a transmit line, a receive line, and a ground line electrically connected to the data converter.

[c16] 16. The data to charge adaptor of claim 13 further comprising a first ground line of the first cable electrically connected to a third ground line of the third cable.

[c17] 17. The data and charge adaptor of claim 13 wherein the data converter is capable of converting second format data at the second cable socket to first format data at the first data line.

[c18] 18. The data and charge adaptor of claim 13 further comprising a charge light emitting diode (LED) electrically connected to the first or third power line, the charge LED for indicating power on the first and third power lines.

[c19] 19. The data and charge adaptor of claim 13 further comprising a data LED electrically connected to the first

or second data line, the data LED for indicating data transfer between the first and second data lines.